# **AIR-CELL** Insulbreak®

### THERMAL BREAK SOLUTION



- Delivers R0.20 thermal break
   Solution for BCA compliance for steel-framed construction.
- Advanced thermal performance
  Helps achieve a 6-star house energy rating.
- Three products in one
  Acts as a thermal break, insulation, and vapour barrier in single application.
- Fibre-free, non-allergenic, non-itchy Poses no health and safety risk and is non-asthmatic.
- Quick and easy to install
   Saves time and helps reduce labour costs compared to conventional bulk insulation.
- Tough, strong, durable
   Rated Extra Heavy Duty.
- Waterproof and unaffected by moisture Ideal in humid climates and protects against water damage.
- Anti-bacterial and anti-fungal
   Will not promote the growth of fungi or bacteria.
- Rodent and insect resistant
   Does not provide a nesting medium for rodents and insects.
- Compliant with Australian Standards Complies with AS/NZS 4859.1.









## **AIR-CELL** Insulbreak®

#### **Product Description**

Kingspan AIR-CELL Insulbreak® is a 3-in-1 insulation, vapour barrier and thermal break solution for steel-framed contruction. In steel-framed buildings Kingspan AIR-CELL Insulbreak® delivers the R0.20 thermal break required for BCA compliance\*, reducing thermal bridging and conductivity between building elements. Kingspan AIR-CELL Insulbreak® is also commonly used in non-steel framed applications such as brick veneer walls and timber framed roofs.

*Kingspan* **AIR-CELL** Insulbreak® is manufactured with a patented physically cross-linked, closed-cell foam structure, and sandwiched by highly reflective foil surfaces.

\* Refer BCA Vol. 1 Section J 1.3(d), 1.5(e); Vol. 2 3.12.1.2(c), 3.12.1.4(d)

Product Data			
Product Thickness	6.5mm	8mm	
	AIR-CELL Insulbreak® 65	AIR-CELL Insulbreak® 80	
Thermal Break	R0.20	R0.25	
Roll Diameter	455 mm	500 mm	
Roll Weight	9.5 kg	10 kg	
Roll Size	1350mm x 22	1350mm x 22.25 m (30 m <sup>2</sup> )	
Reflectance			
Anti-Glare Face	95%		
Reflective Face	97%		
Emittance			
Anti-Glare Face	E0.05		
Reflective Face	E0.03		

#### Thermal Performance

Application	Heat Flow In	Heat Flow Out
Steel stud-framed walls AIR-CELL Insulbreak® 65 AIR-CELL Insulbreak® 80	R <sub>⊤</sub> 1.6 R <sub>⊤</sub> 1.7	R <sub>⊤</sub> 1.8 R <sub>⊤</sub> 1.9
Commercial office roof^ AIR-CELL Insulbreak® 65	R <sub>⊤</sub> 3.2	R <sub>⊤</sub> 1.4
Brick veneer walls AIR-CELL Insulbreak® 65	R <sub>⊤</sub> 1.9	R <sub>⊤</sub> 2.2

^ Suspended ceiling at 100mm-1200mm depth.

The R-values shown are Total R-values for the building element as required by the Energy Provisions of the Building Code of Australia. Kingspan AIR-CELL® products are manufactured, tested and packaged in conformance with AS/NZS 4859.1:2002 - Amdt 1. The contribution of the product Total R-values depends on installation and environmental conditions. The R-value will be reduced in the event of the accumulation of dust on the upward facing surfaces and in those cavities that are ventilated.

#### **Product Testing**

Test	Test Method	Result
Corrosion Resistance	AS/NZS 4859.1 Appendix I	Pass
Flammability	AS 1530.2	Low (Index ≤ 5)
Ignitability Flame Spread Heat Release Smoke Release	AS 1530.3	0/0/0/0-1
Cone Calorimeter	AS/NZS 3837	Group 1
Thermal Resistance	ASTMC518	R0.20 (6.5 mm) R0.25 (8 mm)
Emittance	ASTM-E408	Reflective E0.03 Anti-Glare E0.05
Vapour Transmission	ASTM-E96	Medium
Dry Delamination	AS/NZS 4201.1	Pass
Wet Delamination	AS/NZS 4201.2	Pass
Shrinkage	AS/NZS 4201.3	≤ 0.5%
Duty	AS 4200.1 6.1.4	Extra Heavy





